

REMARKS

Claims 1 and 10 are amended in order to more particularly point out, and distinctly claim the subject matter which the Applicants regard as their invention. Support for the amendment is found at least at Tables 1 and 2 and the specification at pages 38-47. The Applicants respectfully submit that no new matter has been added. It is believed that this Amendment is fully responsive to the Office Action dated July 16, 2010.

Independent Claim 1, as amended, is to a nozzle for coloring an electric wire, which spouts a liquid coloring agent with a specific amount thereof per spouting toward an outer surface of the electric wire so that a liquid drop of the coloring agent adheres to the outer surface of the electric wire. The nozzle includes a receiver for receiving the coloring agent therein, a first nozzle part formed in a cylindrical shape for allowing the coloring agent to pass therethrough, the first nozzle part communicating with the receiver, the first nozzle part being coaxial with and separate from the receiver, and a second nozzle part formed in a cylindrical shape having an inner diameter smaller than that of the first nozzle part for allowing the coloring agent to pass therethrough, and an outer diameter equal to that of the first nozzle part, the second nozzle part being connected to the first nozzle part, wherein the coloring agent has viscosity less than 10 mPa·s (millipascal·second) where the second nozzle part is disposed nearer to the electric wire than the first nozzle part is disposed, and where between the first and second nozzle parts there is formed a step protruding inwardly between the first nozzle part and the second nozzle part, and the first and second nozzle parts are always in open communication with each other for spouting of liquid coloring agent there-through from the receiver. The nozzle satisfies a condition of $8 \leq L/l \leq 10$, wherein L is the sum of a length

of the first nozzle part and a length of the second nozzle part in a direction in which the coloring agent flows, and l is the length of the second nozzle part in the direction in which the coloring agent flows, and satisfying a condition of $4 \leq D/d \leq 6$, wherein D is an inner diameter of the first nozzle part, and d is an inner diameter of the second nozzle part. Independent Claim 10, as amended, is to a nozzle for coloring an electric wire, which spouts a liquid coloring agent with a specific amount thereof per spouting toward an outer surface of the electric wire so that a liquid drop of the coloring agent adheres to the outer surface of the electric wire. The nozzle includes a receiver for receiving the coloring agent therein, a first nozzle part formed in a cylindrical shape for allowing the coloring agent to pass therethrough, the first nozzle part communicating with the receiver, the first nozzle part being coaxial with and separate from the receiver, and a second nozzle part formed in a cylindrical shape for allowing the coloring agent to pass therethrough, the second nozzle part having an outer diameter equal to that of the first nozzle part and being connected to the first nozzle part, wherein the coloring agent has a viscosity less than 10 mPa·s (millipascal·second), where the second nozzle part is disposed nearer to the electric wire than the first nozzle part is disposed, and the first and second nozzle parts are always in open communication with each other for spouting of liquid coloring agent there-through from the receiver. The second nozzle part is made of polyetheretherketone, and satisfies a condition of $8 \leq L/l \leq 10$, wherein L is the sum of a length of the first nozzle part and a length of the second nozzle part in a direction in which the coloring agent flows, and l is the length of the second nozzle part in the direction in which the coloring agent flows, and satisfying a condition of $4 \leq D/d \leq 6$, wherein D is an inner diameter of the first nozzle part, and d is an inner diameter of the second nozzle part.

In the Office Action. Claims 1-5 were rejected as anticipated under 35 U.S.C. 103(a) in view of Moen (U.S. 3,273,757) and Claims 9 and 10 were rejected as obvious in view of a combination of Moen and Rau (U.S. 4,897,439). Reconsideration and removal of these rejections are respectfully requested in view of the present amendments to Claim 1 and the following remarks.

In the Office Action it is asserted that it would have been obvious to use the relative lengths of first part and second part of the nozzle and the ratio of diameters of the first and second parts, as added to the claims by the last amendment.

It is also asserted that while the ratio of lengths and diameters are argued to yield unexpected and patentably distinct results, and the data in Table 1 and Table 2 of the specification were referred to as supporting the conclusion of non-obviousness. The Office Action maintains that the results described in the specification are based on relative subjective judgments (“some adhesion”, “little adhesion”, “practically uniform”, etc.) that are not able to be evaluated. It is thus maintained that the data presented do not establish a sufficient basis for evaluating if the improvement results in unexpected and patentably distinct results.

It appears that the Office Action is alleging that the results shown in Tables 1 and 2 of the specification are merely subjective and no definite numerical values are presented to show the advantages of the length ratio claimed and the diameter ratio claimed.

Applicants would point out that the results shown in the specification and Tables are sufficiently precise so as to show the advantages of the present specifically claimed apparatus with the specific constitution claimed. Applicants have also amended the claims herein to provide a specific viscosity of the coloring agent which is nowhere taught or suggested in the prior art.

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In view of the aforementioned amendments and accompanying remarks, Claims 1-5, 9 and 10, as amended, are believed to be patentable and in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the Applicants' undersigned agent at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, the Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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